

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number  
**WO 2004/001671 A1**

(51) International Patent Classification<sup>7</sup>: **G06T 5/00**,  
G01N 33/68, G06K 9/34

(21) International Application Number:  
PCT/SE2003/001060

(22) International Filing Date: 19 June 2003 (19.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0201894-3 19 June 2002 (19.06.2002) SE

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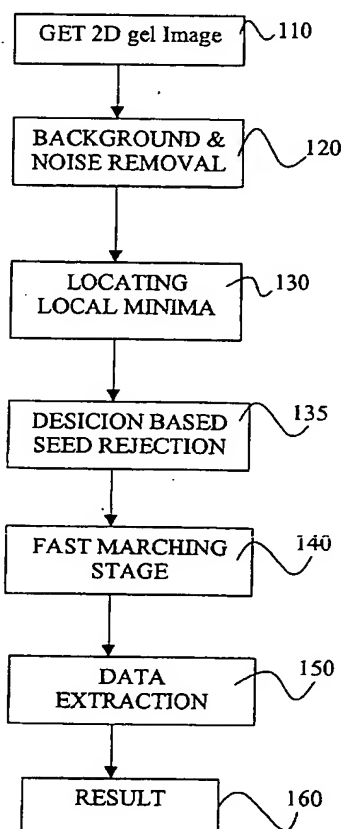
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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,  
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: METHOD AND MEANS FOR 2D-GEL-IMAGE SEGMENTATION



(57) Abstract: The present invention relates to the segmentation of two-dimensional gel electrophoresis images (2D images). The method according to the invention associates an initial protein seed candidate with an interface circumscribing said seed and thereafter brings said interface to evolve in accordance with a defined speed function  $F(x, y)$ . The evolution of the interface is halted by a stopping criterion,  $C$ . According to the invention, the speed function can depend on a wide variety of parameters such as the pixel intensity, the curvature of the pixel intensity, the distance to the initial seed, the curvature and/or shape and/or normal direction and/or position of the evolving interface. The stopping criterion depends e.g. on the speed function  $F$  and/or the time of arrival  $T(x, y)$  and/or the departure time  $T_d$  for said interface. The invention provides criteria for a specific treatment of saturated spots and to make sure that interfaces never overlap.

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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
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SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.

This declaration is directed to the international application of which it forms a part (if filing declaration with application).

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Prior Applications: SE 0201894-3, filed on 19 June 2002

I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.

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